

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
FIRST APPELLATE DISTRICT
DIVISION THREE

RODEO CITIZENS ASSOCIATION,

Plaintiff and Appellant,

v.

COUNTY OF CONTRA COSTA et al.,

Respondents;

PHILLIPS 66 COMPANY,

Real Party in Interest and Respondent.

A151184

(Contra Costa County
Super. Ct. Nos. MSN15-0301,
MSN15-0345, MSN15-0381)

The County of Contra Costa (the county) certified an environmental impact report (EIR) and approved a land use permit for a “Propane Recovery Project” at an oil refinery owned and operated by Phillips 66 Company (Phillips) in Rodeo, California. In response to consolidated petitions filed by Rodeo Citizens Association (Citizens) and others,¹ the trial court issued a peremptory writ of mandate requiring the county to set aside the certification of the EIR and approval of the land use permit and to correct specified inadequacies in the EIR in the analysis of air quality issues.

¹ Communities for a Better Environment and SAFER California also filed petitions challenging the county’s approval of the project and certification of the EIR. Neither has appealed the trial court decision.

On appeal, Citizens contends the trial court erred in rejecting its additional arguments that the project description and the analysis of greenhouse gas emissions and environmental hazards fail to comply with the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code,² § 21000 et seq.). We find no error in the trial court’s conclusions and shall affirm the peremptory writ as issued.

Background

Through a series of steps (separation, conversion, purification and blending), oil refineries process crude oil into numerous usable products. Crude oil is the basic petroleum feedstock³ that is processed at a refinery. “Crude oil contains many different hydrocarbon molecules, usually with a wide range of boiling points, representing many potential products such as propane, butane, gasoline, jet fuel, diesel oil, and fuel oil. Because crude oil is a natural product, there is a wide variation in the characteristics of a crude depending mostly on the wells from which it is obtained. . . . [¶] Crude oil consists mainly of hydrocarbons, chemical compounds made up of hydrogen and carbon atoms that are combined into molecules of different sizes, shapes, and configurations. The smallest hydrocarbon molecules, with only a few atoms of hydrogen and carbon, such as methane, ethane, propane and butane, are gases under normal conditions, while somewhat larger hydrocarbon molecules, such as gasoline and diesel, are liquids and very large hydrocarbon molecules, such as asphalt and tar, are solids. These basic physical properties result mainly from the number of carbon atoms in each compound and give the crude the name ‘light’ or ‘heavy’, depending on the fractions of lighter and heavier hydrocarbons in the crude oil.”

Phillips’ “San Francisco refinery” has two facilities: one near Rodeo and the other near Santa Maria. The Santa Maria refinery processes mainly heavy crude oil, then sends

² All statutory references are to the Public Resources Code unless otherwise noted.

³ “The term ‘feedstock’ . . . is commonly used to denote the fluid material that is fed into a refinery process unit.”

the semi-refined product via a 200-mile pipeline to the Rodeo refinery for “upgrading into finished petroleum products.” The Rodeo refinery, at issue in the present action, occupies 1,100 acres. A 300- to 600-foot wide strip of undeveloped land serves as a buffer between the Rodeo refinery and the nearest residential area. The Refinery is able to process “a wide variety of crude oil feedstocks” from heavy to light into finished petroleum products. In addition to the crude oil received by pipeline from the Santa Maria refinery, the Rodeo refinery also receives crude oil from a variety of domestic and foreign crude sources delivered by ship to its Marine Terminal on San Pablo Bay. Finished products are shipped by rail from the refinery for sale.

The process of refining crude oil produces a byproduct referred to as refinery fuel gas that contains, among other things, commercial quantities of propane and butane. As set forth in the EIR, “Most refineries recover liquid propane and butane for product sales. At the [Rodeo] refinery, only a portion of the available [refinery fuel gas] stream is recovered and shipped by rail. In the summer, up to 9,000 barrels per day are shipped by rail. The remaining propane and butane are used as fuel . . . to provide the heat input for the refinery processes.”

In June 2012, Phillips submitted its application for a land use permit in connection with the proposed Propane Recovery Project (project).⁴ The project would modify existing facilities and add new facilities to enable Phillips to recover butane and propane from its refinery fuel gas and ship it by rail for sale. Phillips proposes to recover up to 14,500 barrels per day of propane and butane for commercial sale. “As a result of the proposed project, the heat input from the propane and butane to be removed from the [refinery fuel gas] system would be replaced with heat input from additional natural gas purchased from Pacific Gas and Electric Company.”

⁴ The proposed project would be a permitted project within the heavy industrial zoning applicable to the Rodeo refinery but “a land use permit is required under the Hazardous Waste or Hazardous Material Ordinance § 84-63.1002 of the Contra Costa County Code.”

In June 2013, the county released a draft EIR (DEIR) for the project. In November 2013, following a public comment period, the final EIR (FEIR) was published. Thereafter, the county planning commission certified the FEIR and approved the project. That decision was appealed to the county board of supervisors. Shortly before the appeal hearing, the Bay Area Air Quality Management District (the Air District) asked for more information about the health risk assessment and the greenhouse gas analysis in the FEIR. On June 3, 2014, the board of supervisors directed staff to prepare a recirculated draft EIR (RDEIR) addressing the air and health issues raised by the Air District. In January 2015, after the comment period ended, the county published its recirculated Final EIR (RFEIR).⁵

On February 2, 2015, the county zoning administrator recommended that the board of supervisors certify the RFEIR. The following day the board certified the RFEIR and approved a land use permit and a mitigation monitoring reporting program for the project.

On March 5, 2015, Citizens filed a petition for writ of mandate challenging the county's approval of the project and certification of the RFEIR. Citizens argued that the project description is inaccurate, that the RFEIR overlooks the increased risk of accidents from train derailments or explosions as a result of the project, and that the analysis of public health impacts, cumulative impacts, air quality impacts and impacts from emissions of greenhouse gases is insufficient. Following briefing and oral argument, the trial court issued an extensive decision. The court found certain deficiencies in the air quality section of the RFEIR and issued a writ of mandate requiring reconsideration of that section, but rejected Citizens' remaining arguments. Citizens timely filed a notice of appeal.

⁵ The RFEIR includes, among other documents, the DEIR, FEIR, RDEIR, all comments on the RDEIR and the county's responses to comments.

Discussion

1. Project Description

A “project” under CEQA is “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” (CEQA Guidelines,⁶ § 15378(a).) CEQA requires an “accurate, stable and finite project description,” which is “the *sine qua non* of an informative and legally sufficient EIR.” (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655.) Whether an EIR correctly describes a project is a question of law, subject to de novo review. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.)

Citizens contends the RFEIR incorrectly defines the project to include only the recovery and sale of propane and butane from refinery fuel gas. It asserts the project description is “defective because it fail[s] to disclose that the project will involve the more frequent processing of nontraditional crudes containing higher levels of propane, butane, and contaminants.” Citizens argues, “The imported tar sands and Bakken crudes that will be processed by the Rodeo Refinery [(hereinafter, the refinery)] have higher levels of dangerous chemicals, which are more corrosive and result in higher emissions of air pollution during the refining processes. The county, however, failed to disclose the scope of the project and evaluate the impacts that would result from processing these tar sands and Bakken crudes.”

⁶ “The term ‘CEQA Guidelines’ refers to the regulations for the implementation of CEQA authorized by the Legislature (Pub. Resources Code, § 21083), codified in title 14, section 15000 et seq. of the California Code of Regulations, and ‘prescribed by the Secretary of Resources to be followed by all state and local agencies in California in the implementation of [CEQA].’ [Citation.] In interpreting CEQA, we accord the CEQA Guidelines great weight except where they are clearly unauthorized or erroneous.” (*Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372, 380, fn. 2.)

Phillips disputes the contention that that the RFEIR “masks a covert plan to change the refinery’s crude slate.” It argues that “substantial evidence establishes that the project was designed and permitted on the basis of the refinery’s *existing operations*; the project does not require, and is not required by, a switch in crude.”

According to the RFEIR, the refinery is “currently able to process a wide variety of crude oil feedstocks based on its current operating configuration and existing permits. The proposed project would not affect that ability, nor would it have any effect on the types and/or quantities of crude oil feedstocks that can be processed at the refinery. Regardless of whether the project is approved, the refinery would still be able to process the same variety of crude oils that are processed currently and allowed by current permits.” The RFEIR continues, “the project does not propose to increase the production of propane or butane at the refinery, nor does the project propose to add, change or modify operation of other process units, such as the coker, at the refinery. . . . [T]he project would not require the refinery to change the basic feedstocks that are currently received and processed at the refinery.”⁷

Citizens’ argument regarding the RFEIR’s purported failure to disclose the alleged switch to heavier crude oil feedstocks was raised during the public comment period and addressed directly in Master Response 2.4: “Many commenters on the RDEIR have reiterated concerns, theories, and assertions expressed by commenters on the 2013 DEIR and the 2013 FEIR that the refinery, via the proposed project, is seeking to change or would be required to change its current crude feedstocks, and that the proposed project is a deliberate action intended to support the implementation of this change. [¶] These concerns include such issues as the source of the crude, e.g., Canadian tar sands, or new crudes produced in North America such as the Bakken crudes from North Dakota and

⁷ The refinery currently “processes crude oil from central California received by pipeline and from a variety of domestic and foreign crude sources delivered by ship at the Marine Terminal.” These imported crudes range from a very light crude from Bolivia to a heavy crude from Canada.

other similar new feedstocks, the potential effects from extracting these crudes, and assertions about what potential effects using these crudes as feedstocks for the refinery could have. [¶] Over the past several years there has been extensive concern over projects which propose the extraction of crude oil from tar sands in Canada and other controversial sources, or which would bring new sources of crudes to refineries in the United States, including California, via new pipelines or by rail. The county acknowledges these public concerns and has conducted the environmental analysis presented in the RDEIR with such concerns in mind as is required by CEQA. However, it is important to note that since first presented to the county by Phillips 66 in 2012, the description of the proposed project as presented in the 2013 DEIR and 2013 FEIR, and in the RDEIR, has been consistent in that it: 1) is not a project dependent on a source of crude oil feedstock, or a change in crude oil feedstocks, 2) does not involve any request to approve the transport of crude oil by rail into the Rodeo Refinery, 3) makes no request to change the throughput of the refinery, and most crucially, 4) utilizes an existing [refinery fuel gas] stream to extract propane and additional butane without any modifications to other parts of the refinery. . . . [¶] As discussed in RDEIR Section 3.4.2.1, *Refinery Fuel Gas Propane/Butane Recovery Unit and Associated Propane Treatment*, and shown in Figure 3-7, the proposed project's design basis was derived from data taken at the refinery in August, 2011. In the same section, the RDEIR also provides an update to substantiate this 2011 design basis with the most recent full year (2013) of [refinery fuel gas] data from the refinery in Figure 3-8. This figure shows that for 2013 an average of 13,970 barrels per day (BPD) of propane and butane were available and that monthly this quantity of propane and butane varies. Note that between the 2011 design basis and the 2013 data, no change to crude feedstocks, such as those of concern to commenters, had been made. These data . . . show that contrary to assertions of commenters, who assert that the refinery has to change its feedstocks to provide sufficient [refinery fuel gas] to support this proposed project, quite the reverse is true in

that the existing refinery baseline condition had and has sufficient propane and butane feedstocks to support the extraction rates of propane and butane sought by Phillips 66 for the proposed project.” Master Response 2.4.2 indicates further that “should some change occur in the[] feedstocks that would increase the amount of [liquid propane gas] available for extraction by the refinery, the Air District air permit would limit this extraction to the amount presented in the RDEIR (i.e. 14,500 BPD), and should less [liquid propane gas] be available for extraction, Phillips could only extract what would be available. Therefore, assertions by the commenters of the project’s connection to potentially changing crude feedstocks are not supported by the facts that the proposed project was designed and based on existing refinery conditions.”

Citizens only weakly contests the accuracy of the data cited in the Master Response. It argues in a footnote that “the project appears to be designed to accommodate far more [liquid propane gas] than exists in the refinery’s current feedstocks. Even if these limits are design limits, not recovery goals, the fact that the project is designed to recover such large amounts of [liquid propane gas] is yet more evidence that a new crude slate, containing larger quantities of [liquid propane gas], is something that Phillips 66 contemplates processing, and that the county could have foreseen, or at a minimum, should have analyzed.” Among other things, Citizens cites a report by Greg Karras, a senior scientist with Communities for a Better Environment, which calculates, “based on publicly verifiable, plant-specific data for [liquid propane gas] recoverable with available technology . . . that roughly half Phillips’ proposed [liquid propane gas] recovery capacity would be idled” under the baseline conditions used in the RDEIR. He notes that the RDEIR’s “revised estimate now tacitly admits a small baseline [liquid propane gas] shortfall below project design capacity, ranging from 10-31% of this capacity being idled, depending upon the averaging period chosen.” The county’s response to the Karras’s comments explains why the excess capacity in the project’s design does not support the conclusion that a change in crude oil feedstock should be anticipated. The county’s

response states, “Refinery economics favor gasoline and diesel production over [liquid propane gas] production. This occurs because the market place demand for gasoline and diesel is much greater than [liquid propane gas]. The wholesale price for gasoline and diesel product is much higher than [liquid propane gas]. To maximize refinery profit now and in the future, the refinery would continue to maximize motor fuel production over production of byproduct [liquid propane gas]’s. . . . [F]eedstock selection would remain optimized around gasoline and diesel production. Refinery production is maximized now, and in the future, when the production of [liquid propane gas] is minimized.” “Although the project design is based on recovering the amount of [liquid propane gas] currently in the RFG, the objective of the project is not to generate more [liquid propane gas].” Accordingly, substantial evidence supports the county’s conclusions that the project is designed to maximize recovery of butane and propane from current refinery operations and that it is not intended to generate additional quantities of commercial propane and butane.

Citizens also argues that public statements by Phillips executives are inconsistent with statements in the RFEIR that the project would not “have any effect on the types and/or quantities of crude oil feedstocks that can be processed at the refinery.” Citizens cites statements made by Phillips officers to shareholders and on its website that seem to indicate that Phillips intends to shift to heavier crude feedstock at the refinery. The documents include, among other things, a 2013 map of “Phillips 66 Advantaged Crude Activities” which shows Phillips’s “planned shipments of tar sands and Bakken crude to the Rodeo Refinery by marine vessel from the Pacific Northwest, and shipments of tar sands crude to the Santa Maria Facility by rail”; a statement by Phillips’ chief financial officer presenting plans for importing cost-advantaged crudes to the San Francisco Refinery “via rail cars, and then also going over to the waterfront and barging;” and news articles reporting that Phillips had “begun moving cut-price Canadian crude to its California refineries.” Citizens also notes that Phillips has sought permits for

infrastructure projects that would enable tar sands and Bakken crude oil deliveries by marine vessel at the refinery and tar sands crude deliveries by rail to its Santa Maria facility, which then reach the refinery by pipeline.⁸ While this evidence certainly supports the inference that Phillips intends to modify its crude oil feedstocks, it fails to draw any connection between the proposed project and any intended change. None of the statements cited establishes that the project is dependent on a change in feedstock or, more importantly, that the intended change in feedstock is dependent on approval of the project. By approving the project, the county is not expressly or implicitly approving a change in crude oil feedstocks. Nor is such an approval necessary in order to approve the project. Presumably, any change in the crude oil feedstock would occur in compliance with existing permits.⁹

In short, the RFEIR demonstrates that the proposed project to enable Phillips to recover for sale butane and propane from its refinery fuel gas will not increase its present capacity to process heavy crude. And although more butane and propane can be extracted from the heavier crude, this fact does not incentivize Phillips to process more heavy crude because the selection of feedstock is governed by the determination of the crude oil that will yield the more profitable gasoline and diesel products. Accordingly, substantial evidence establishes that the project, as described in the RFEIR, is unrelated to a potential change in crude oil feedstock.

For this reason, Citizens' reliance on *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70 (*City of Richmond*) is misplaced. In *City of*

⁸ Citizens does not reassert the argument made in the trial court that a single EIR should have been prepared to address all of these projects. Instead, it argues that the other proposed projects "offer further evidence of a foreseeable change in crude quality that should have been part of the description of the Propane Recovery Project."

⁹ In this regard, the county's response to comments on the RDEIR explains that "at present time a company's purchase of raw material is a business activity and not a CEQA project or action that would require discretionary permit or approval by the county."

Richmond, Chevron Corporation (Chevron) sought approval for a proposed project that would allow it to increase production of gasoline by approximately 6 percent at its refinery by improving “the refinery’s ability to process a more varied proportional mix of crude oil types than it currently processes, including crude oil with higher sulfur content.” (*City of Richmond, supra*, 184 Cal.App.4th at pp. 76, 81.) Plaintiffs challenged the project’s approval arguing that “the EIR’s discussion of the types of crude that [Chevron’s] refinery currently processes, as compared to the types of crude [Chevron’s] refinery would be able to process after the project was implemented, was so ‘unclear and inconsistent’ that the EIR failed to provide an ‘accurate, stable, and finite project description.’ ” (*Ibid.*)

The *City of Richmond* court agreed that the project description was inadequate and misleading because it gave conflicting signals to decision makers and the public regarding “whether the Project includes any equipment changes that would facilitate the future processing of heavier crudes at [Chevron’s] Refinery.” (*City of Richmond, supra*, 184 Cal.App.4th at p. 83.) The court explained, “The EIR states in conclusory terms that the proposed Project will not result in an increased capacity to process lower quality heavier crude, and that Chevron seeks only the ability to refine crude with higher sulfur content. However, that statement is not adequately supported by facts and analysis contained in the EIR. Moreover, there was conflicting information developed during the EIR process that casts serious doubt on these assertions.” (*Ibid.*) The court found that “the EIR itself contains conflicting statements about the objectives of the Project. On one hand, the EIR states ‘[t]he Proposed Project does not include any process and equipment changes that would facilitate the processing of heavier crudes at the Chevron Richmond Refinery.’ On the other hand, the EIR explains that ‘[r]efiners have had to adapt to a crude oil supply that is increasingly heavier and more-sour (higher sulfur content).’ . . . ‘The supply of crude oil to California refineries has changed substantially during the last 10 years, with light to intermediate crudes becoming less available It is within the

context of these changes in crude oil supply that the Renewal Project is proposed.’ . . . Consequently, the EIR claims that the project is designed to allow more flexibility in refining future crude supplies that the EIR describes as ‘increasingly heavier’; but on the other hand, denies that the project will enable the refinery to process heavier crude.” (*Ibid.*, italics omitted.) The court also cited a filing by Chevron with the United States Security and Exchange Commission that appeared to conflict with the statements in the EIR and suggest that its project was designed to increase the flexibility to process heavier crude oil. (*Id.* at p. 84.)

The trial court found the present case distinguishable from *City of Richmond* in many respects. First, the court found that unlike the EIR in *City of Richmond*, the RFEIR says quite clearly, “The refinery is currently able to process a wide variety of crude oil feedstocks based on its current operating configuration and existing permits. The proposed project would not affect that ability, nor would it have any effect on the types and/or quantities of crude oil feedstocks that can be processed at the refinery.” The court found that there is “no equivocation in the EIR or in the documents supporting it” regarding this assertion. The court also rejected Citizens’ “challenge [to] the veracity of that assertion” based on extrinsic evidence developed during the review and comment period.¹⁰ We agree with the trial court’s reasoning. As established above, the record contains substantial evidence that Phillips’ propane recovery project is independent of any purported change in the crude oil feedstock used at the Refinery and will not increase its present capacity to refine heavier crude oils. Thus, the trial court properly concluded that the project description in the RFEIR is accurate and adequate.

¹⁰ Contrary to Citizens’ argument, the trial court did not interpret CEQA “to mean that inconsistencies and shortcomings in a project description must appear on the face of a CEQA document in order to render a project description inadequate.” The court addressed and rejected Citizens’ evidence on the merits.

2. *Greenhouse Gas Emissions*

The RFEIR concludes that the proposed project would result in a net decrease in operational greenhouse gas emissions. The RFEIR explains that “emissions reductions associated with replacing propane and butane combustion emissions with natural gas combustion emissions more than compensate for project-related increases of [greenhouse gas] emissions associated with the proposed new boiler, increased rail activity, increased commuter trips and increased electrical demand.” Citizens does not challenge this finding on appeal. Rather, it contends the RFEIR is inadequate insofar as it fails to consider greenhouse gas emissions “resulting from the combustion of the propane and butane that will be captured by the project and sold to downstream users.”

With respect to the use by purchasers of the downstream propane and butane, the RFEIR states, “Combustion of propane and/or butane as a fuel source results in [greenhouse gas] emissions; however, propane and butane also have non-fuel uses, described below, that generate negligible [greenhouse gas] emissions. Due to the dynamic nature of the propane and butane marketplace, Phillips 66 cannot be certain how the propane and butane it would manufacture would ultimately be used; therefore, quantification of the associated net [greenhouse gas] emissions would be speculative and inclusion of such information in an EIR is precluded by CEQA Guidelines § 15145.” The RFEIR continues, “Because operations of the refinery have not yet captured and/or sold propane, Phillips does not currently have a defined list of wholesale companies that may purchase the product or retailers to whom they may then sell the product. It is also not possible to determine precisely what the end use of the product would be, what existing resource it may replace, and whether there would be any overall change in market demand or supply as a result of the propane sold by Phillips 66. However, some examples of well-known uses made of propane are discussed below. [¶] Propane is considered an alternative fuel because when it is combusted, it has lower [greenhouse gas] emissions than other fuels, such as coal, home heating oil, fuel oil, diesel, kerosene, gasoline, and

ethanol. Therefore, propane is often used to partially displace [greenhouse gas] emissions associated with these other fuels. In fact, under (Assembly Bill) AB-118, the California Energy Commission (CEC) has set aside grant money to assist companies that switch from gasoline/diesel powered vehicles to propane powered vehicles because conversion to propane ‘offers the potential for immediately reducing [greenhouse gas] emissions’ for light and medium duty vehicles. . . . Other examples of where the substitution of propane for other currently used fuels could produce net reductions in [greenhouse gas] emissions are heating systems relying on coal or home heating oil, gas driven heat pumps, desiccant dehumidifiers, and commercial water heating In addition, a common use of propane is for residential barbeques. Propane barbeques typically produce one-third the [greenhouse gas] emissions than charcoal barbeques [¶] Without knowing the approximate amounts of propane that would ultimately be used in different post-sale applications, and whether the use of the propane would represent an expansion of fuel combustion or a replacement of combustion of less clean fuels, the associated emissions cannot reasonably be estimated without undertaking a substantial amount of speculation.”

With respect to butane, the RFEIR states, “Butane has been sold by the refinery to wholesalers since the 1970s. Currently, butane is shipped via rail from the refinery. The most recent wholesale purchaser has advised the refinery that the most common uses its customers make of butane are chemical blending, chemical feedstock, gasoline blending (additive), or gasoline feedstock When blending into chemicals there may be no combustion, and therefore no generation of [greenhouse gas] emissions. Because combustion of butane produces lower [greenhouse gas] emissions than combustion of gasoline, combustion of the blended gasoline produces lower [greenhouse gas] emissions than combustion of gasoline that has not been blended with butane. . . . Without knowing the amounts of butane ultimately used in different applications, the emissions consequences of butane use cannot be calculated without undertaking a substantial amount of speculation. Because of uncertainty surrounding end-use, it also cannot be

determined how the capture and sale of the additional butane resulting from the proposed project would affect the overall market and use of butane.”

Contrary to Citizens’ argument, the failure to quantify the greenhouse gas emissions from the downstream uses of the recovered propane and butane under these circumstances does not violate CEQA. “ ‘CEQA gives lead agencies discretion to design an EIR . . .’ [citation] and the agency is not required to conduct every recommended test or perform all requested research or analysis [citation]. ‘If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.’ [Citation.] An EIR is required to evaluate a particular environmental impact only to the extent it is ‘reasonably feasible’ to do so. [Citations.] More generally, ‘the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project.’ ” (*Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 937.) Here, the county reasonably concluded that quantification of downstream emissions would be speculative and thus no further analysis was required.

As Phillips explains in its brief, the uncertainty regarding the end uses of the propane and butane “relates not just to the extent of the impact, but to the fundamental direction of the impact, i.e., whether the change may be beneficial or adverse. Depending upon the ultimate uses of the propane and butane, and how those products affect the uses of other types of fuels, there may be a net decrease in [greenhouse gas] emissions, no net change, or an increase in . . . emissions. . . . Yet as the [RFEIR] explains, propane and butane have many non-fuel uses that generate negligible [greenhouse gas] emissions. Even when used as fuel, propane and butane may be used as substitutes for other fuels that emit higher levels of [emissions], resulting in a net reduction in . . . emissions. The State of California has even set aside grant money to encourage companies to switch from diesel and gasoline powered vehicles to propane-powered vehicles specifically to

accomplish reductions in [greenhouse gas] emissions. Thus, the fuels market is in a state of transition driven in part by government programs intended to promote fuel-switching, so that historical market data would be an unreliable predictor of the future.” As Phillips argues, the volatile nature of the market for propane and butane makes quantitative projections for the market as a whole particularly speculative.

Comments by the Air District provide strong support for the county’s conclusion. The Air District objected to the November 2013 FEIR because it did not adequately analyze the project’s emission sources and emission estimates.¹¹ Its letter to the board of supervisors reads, “Air District staff recommends the FEIR fully explain how the project decrease in [greenhouse gas emissions] is real, permanent, quantifiable, and enforceable because an unknown quantity of sold butane and propane gas can reasonably be expected to be combusted.” In a second letter the Air District elaborated, “The refinery currently extracts butane for commercial sale and expects to recover more butane and begin extracting propane as a result of implementing this project. Both are widely used as transportation fuels, for space heating, and a variety of other processes that involve combustions. An analysis that demonstrates whether [greenhouse gas] emissions will increase or decrease that also considers the potential uses of commercial products is recommended. This may include estimating the percentage of emissions from butane used for combustion or other manufacturing based on existing commercial sales. An evaluation of possible uses of propane besides combustion in which to demonstrate an emission reduction is also highly recommended.” In response to the Air District’s objection, the analysis quoted above was added to the RDEIR. In its comments on the RDEIR, the Air District indicated the RDEIR addressed its “recommendation that the county fully explain the estimated decrease of [greenhouse gas] emissions anticipated to

¹¹ The DEIR and FEIR contained no reference to impacts from downstream greenhouse gas emissions. The Air District’s concerns about downstream emissions were not raised until the appeal was pending before the board of supervisors.

result from the project. The RDEIR justifies the project's [greenhouse gas] emission decrease based on the anticipated change in fuel gas use and the conclusion that accounting for the end use of propane and butane is too speculative to estimate downstream emissions." Given the Air District's substantial expertise in air emissions and that it was the agency that raised the concern, the fact that it was satisfied with the county's response is substantial evidence that the lead agency reasonably determined that further analysis of the potential impacts was impractical and not required. Citizens provides no evidence to refute this conclusion. The trial court properly rejected the contention that the RFEIR is deficient in this respect.¹²

3. *Public and Environmental Hazard Impacts*

Section 4.6 of the RFEIR analyzes the proposed project's impacts on the public and the environment from the handling and transportation of hazardous materials. With respect to impacts from the operation of the project, the RFEIR states, "Refinery operations involve the processing and handling of substances that are classified as

¹² *Sierra Club v. Federal Energy Regulatory Com.* (D.C. Cir. 2017) 867 F.3d 1357 and *Mid States Coalition for Progress v. Surface Transportation Bd.* (8th Cir. 2003) 345 F.3d 520, cited by Citizens, are distinguishable. In *Sierra Club*, the court found that the environmental impact statement for a proposed pipeline failed to "either give[] a quantitative estimate of the downstream greenhouse emissions . . . or explain[] more specifically why it could not have done so." (*Sierra Club*, p. 1374.) The court recognized that in some cases quantification of downstream emissions may not be feasible. In that case, however, because the record contained evidence of the power plants that would be receiving the natural gas and emissions estimates for various types of plants, an estimate based on "some educated assumptions" was appropriate. (*Ibid.*) In *Mid States Coalition for Progress*, the court held that the environmental impact statement was deficient because it ignored the impact of the project on long-term demand for coal and the adverse effects that result from burning coal. (*Mid States Coalition for Progress*, pp. 549-550.) The court emphasized that "when the *nature* of the effect is reasonably foreseeable but its *extent* is not, . . . the agency may not simply ignore the effect." (*Id.* at p. 549.) In contrast to the cases cited by Citizens, the RFEIR here does not ignore the impacts of downstream emissions. It explains what those impacts may be and why quantification would be speculative. No more is required.

combustible and/or flammable with the potential for fires and explosions. Refinery operations also involve the processing and handling of substances that are acutely toxic with the potential of releasing toxic vapors. The risk to the public is measured in terms of the likelihood or probability of an accident and the severity of the consequences of any such accident. . . . [¶] Hazards associated with the proposed project primarily are associated with processing to separate propane and additional butane, storage of propane in the new propane storage area, transfer of propane and additional butane at the tank car loading racks, use and handling of other hazardous materials during processing, and the generation of hazardous materials and wastes from construction activities within the limits of the refinery.” With respect to impacts from the transportation of hazardous materials, the RFEIR explains, “Rail transport of [liquid propane gas], either propane or butane, entails risk. With an unregulated release, a liquid pool may rapidly form and a flammable vapor cloud may begin to spread over the surrounding area. If such a vapor cloud finds an ignition source, the cloud can flash back and even explode if a portion of the flammable gas is in a congested area. This may result in damage to persons and property within the vicinity of the vapor cloud. It is also possible for a sustained torch fire (caused by burning [liquid propane gas] released through a puncture in the tank car to develop a torch fire emitting a radiant heat flux . . . which could lead to injury or fatality depending on how close people are to the fire. In addition to the typical consequences of a hydrocarbon release, [liquid propane gas] in a closed vessel such as a tank car has the potential to undergo a BLEVE [boiling liquid expanding vapor explosion] if the vessel fails catastrophically.” (Fn. omitted.)

As relevant to the present appeal, the RFEIR adopts the following standards of significance to analyze these potential impacts: Whether the project would “(a) Create a significant hazard to the public or environment through the routine transport . . . of hazardous materials; [¶] (b) Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of

hazardous materials into the environment; [and] [¶] (c) Emit hazardous emissions or handle hazardous or acutely hazardous materials . . . within one-quarter mile of an existing or proposed school.” As discussed below, the RFEIR concludes that the project would result in less than significant impacts under standards (a) and (b) and no impact under standard (c). Citizens challenges each of these findings.

With respect to standard (c), the RFEIR states summarily, “The proposed project would be entirely constructed and operated within the refinery. There are no existing or proposed schools within one-quarter mile of the project area. . . . Therefore, there would be no new impact under this criterion.” According to the RFEIR, the Bayo Vista Child Development Center is located “approximately 0.5 mile southwest of the site of the Propane Recovery Unit” and approximately 3,000 feet (.57 miles) from the existing rail spur on which propane-filled tank cars would be staged. Citizens does not dispute the accuracy of these measurements, but insists that the RFEIR omits the fact that the child care center is less than 500 feet from the rail lines on which the propane and butane will be transported from the refinery. As the county contends, this argument is arguably barred because it was not raised in the administrative proceedings. More importantly, potential hazards posed by the rail transportation of the propane and butane are analyzed separately under standard (a), as discussed in detail below. Accordingly, there is no deficiency in the analysis of impacts under standard (c).

With respect to the analysis of transportation impacts under standard (a), the RFEIR concludes the project would not create a significant hazard to the public or environment through the routine transport of hazardous materials. To evaluate the potential risk, the county performed a “Quantitative Risk Analysis which takes into account the consequences of accidental releases as well as the frequency with which such releases could occur. The consequences involved in the releases are modeled with the computer model CANARY by Quest® . . . , which utilizes parameters such as composition information, environmental conditions, and release configuration, combined

with submodels for thermodynamics, heat transfer, and fluid dynamics in order to perform accurate simulations of the release, dispersion, and potential ignition of the fluid. The consequence analysis developed through CANARY is then combined with published data about release frequencies to develop a complete picture of the risk profile posed by the current rail transport of butane and the proposed rail transport to butane and propane.”

The results of the risk analysis “are presented in Figure 4.6-4 as risk transects and show the risk posed by the current rail transport of butane and the proposed rail transport of butane and propane as a function of the distance from the rail line. The rail line is located at zero (0) on the x-axis. The distance away from the rail line is represented as the positive and negative values on the x-axis. As would be expected, the risk associated with the rail transport of butane and propane decreases as one moves away from the rail line.

[¶] While BLEVEs are a dramatic event, they are extremely rare. No BLEVEs of [liquid propane gas] tank cars have occurred in the 20-year period used as the basis of this analysis. It is instructive to review the QRA results with the BLEVE events removed. This result is presented in Figure 4.6-5. As can be seen in Figure 4.6-5, the risks associated with the rail transport of butane and propane drop considerably when the infrequent BLEVE events are removed from the risk calculations. [¶] . . . [¶] As shown in Figures 4.6-4 and 4.6-5, the overall increase in risk due to the additional transport of butane and propane by rail is not materially higher than the current (baseline) risk associated with the current transport of butane and is less than many of the risks the general public is commonly exposed to (see Table 5.4.6-7). Consequently, the proposed project would have a less than significant impact. It should be noted that the risk results presented in Figure 4.6-4 do not include any contribution of risk associated with any other tank cars on the existing rail line route. If such contributions were included, the overall relative cumulative increase in risk associated with the proposed Project transport of butane and propane would be even less and would not be cumulatively considerable.”

Although the RFEIR does not specifically address how the transport of the project's hazardous materials might impact the child care center, Figure 4.6-5 shows that the risk zone for rail transport under the proposed project, without the risk of highly improbable BLEVEs, extends approximately 80 meters (262 feet) from the railroad tracks. The child care center, located 500 feet from the tracks, is safely beyond this distance. Contrary to Citizens' argument, the county was not required to include additional graphics "overlaying the[] transects on a map" which depicted the location of the child care center in relation to the risk zone.

Citizens also argues that the RFEIR fails to properly analyze the project's contribution to the cumulative risk of rail-related accidents. "We review an agency's decision regarding the inclusion of information in the cumulative impacts analysis under an abuse of discretion standard. 'The primary determination is whether it was reasonable and practical to include the projects and whether, without their inclusion, the severity and significance of the cumulative impacts were reflected adequately.' " (*Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 525.)

The cumulative impacts section of the RFEIR (section 5.4) and specifically section 5.4.3.6 relating to hazards and hazardous materials states only that because the proposed project would not result in significant hazards-related impacts, "routine operations would not contribute cumulatively to hazards-related impacts." That section does not address cumulative impacts relating to transportation risks. In its comments to the RDEIR, Citizens questioned this omission and "provided lists of projects that would increase rail traffic along the same rail lines used by the project as well as evidence that this increased traffic could lead to increased accident risk." The county's response explains, however, that "[m]ost of the projects cited by the commenters as 'omitted' from the RDEIR are located substantial distances from the Refinery . . . and most involve transport or refining crude to some degree; they do not involve the transport of [liquid

propane gas] by rail. Comparing potential hazards of transporting [liquid propane gas] and other types of hazardous substances cannot be meaningfully done; this is explained in detail in Master Response 2.5.^[13] [¶] For the projects involving transport of crude by rail note that the trips by rail of these projects are generally new trips, whereas the proposed project utilizes the same train trips by adding tank cars to existing trains and would not increase the total number of train trips. Therefore the proposed project does not make any contribution to potential cumulative impacts associated with increases in numbers of trains from other projects.”¹⁴

On appeal, Citizens suggests that “CEQA does not require a nexus between projects or that they be of a similar type to be included in cumulative impact analyses. Rather, it asks whether projects will cause similar effects—here, risk of train derailment—that might be individually insignificant but cumulatively considerable.” However, the county’s explanation for why a cumulative analysis for transportation

¹³ Master Response 2.5.1 addresses concerns raised by commenters that the RDEIR considered only risk from LPG tank cars but should have considered all tank cars in its analysis. The response states, “The proposed project includes the transportation of [liquid propane gas] (butane and propane) by tank car. The frequency analysis for the transport of butane and propane by rail in the United States is presented on page 4.6-27. It would not be appropriate or accurate to include frequency data covering derailments, releases, etc. for other types of railcars or other types of materials into the analysis. This is because the tank car designs are different for many types of commodities carried by rail and for other materials . . . , which have significantly different hazard impacts than propane or butane. Thus the probability analysis as presented in the RDEIR is correct as it specifically addresses the project’s rail requirements.”

¹⁴ Citizens suggests that the county’s response “conflicts with the RDEIR’s earlier explanation that accident risk should be calculated on a per-car, not a per-train basis.” The statements do not conflict. The cited section of the DEIR merely states that to make “a valid risk comparison” between current conditions and conditions under the proposed project, the DEIR compared the number of tank cars transporting propane and butane. Because the project does not propose new train trips, a comparison of existing train trips to new train trips would clearly be meaningless. The county’s statement that the project would not contribute to increased congestion based on numbers of trains is accurate and does not conflict with the analysis undertaken in the DEIR.

hazards was not included in this case is not unreasonable. (*Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection, supra*, 44 Cal.4th at p. 525 [“[T]he discussion of cumulative impacts should be guided by the standards of practicality and reasonableness.”].)

Finally, the RFEIR concludes, under standard (b), that the project would not create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The RFEIR includes two different analyses of potential hazard impacts from routine operation of the project. The first, found in the 2013 DEIR and FEIR, analyzed both the “severity of the impact and its likelihood of occurrence” and adopts a standard under which an impact would be considered “significant if both the likelihood of the event and the offsite consequence are in the moderate or high category.” The DEIR analyzed six accident scenarios and determined that they all had an “improbable probability of occurrence (less than one release in 100 years).” Of the six scenarios, three had a low offsite consequence (minor injury or damage), two had a moderate consequence (moderate injury or damage) and one had a high consequence (severe injury or fatality). None had the combination of severity and likelihood considered to be significant by the standards adopted in the DEIR.

In response to comments, an additional analysis was conducted in the RDEIR to determine whether the consequences associated with the project’s proposed modifications to the Refinery generated potential hazards that are larger or smaller than the potential hazards that currently exist in the refinery. The RDEIR explains, “In order to evaluate potential safety issues associated with the proposed project, a worst-case consequence analysis was undertaken to evaluate the proposed refinery changes with respect to production, storage, and transfer of butane and propane.” The county’s experts used modeling software to calculate “hazard zones” for the current operations at the refinery and the proposed project operations. Charts and figures included in the RFEIR show that

for releases originating inside the existing refinery configuration, the largest hazard zone, with a radius of 1.9 miles, is from Unit 240 (Unicracker). For releases originating inside the proposed project configuration, the largest hazard zone, with a radius of .9 miles, is from the Propane Recovery Unit (Hydrotreater). “Because Unit 240 and the Propane Recovery Unit are located beside each other in the refinery, the impact zone for the proposed equipment modifications are within the existing refinery impact zones. [¶] The primary conclusions drawn from the worst case modeling results are that for all the potential releases analyzed associated with the additional proposed project operations, the proposed additions result in a smaller potential hazard zones than those posed by the existing refinery configuration.”

Citizens contends the RFEIR “improperly determined the project’s hazard impacts would not be significant by comparing them to existing hazards rather than the existing physical environment.” Focusing solely on the analysis in the RDEIR, Citizens argues, “Although the project adds a new layer of hazards on top of existing hazards, the [RFEIR] treated this increase in hazard as categorically insignificant unless the new hazards would affect new people who previously were not exposed to any hazards at all. Specifically, the county claims the project’s impacts are insignificant because the areas of ‘potential off-site hazards associated with the proposed project . . . are smaller than the potential existing off-site hazards associated with the current refinery operations.’ In other words, the EIR would only find hazards from the project to be significant where they expanded the hazard zone as compared to the existing hazard radius.” Citizens emphasizes, “This comparison does not disclose that the Project will increase hazards within existing hazard zones, and because it finds the impact insignificant, does not include any mitigation to reduce it.”

As noted by the county, Citizens’ argument ignores the analysis in the 2013 DEIR. As set forth above, the DEIR evaluated the significance of the project’s impacts without reference to existing risks posed by operation of the refinery and determined that the

potential impacts were less than significant. In its reply brief, Citizens misreads the DEIR in arguing, “Phillips claims—based on the first DEIR—that any hazard impacts would be insignificant because they are ‘low’ consequence and therefore any increase in their probability of occurring is irrelevant.” Phillips is wrong. As the 2014 RDEIR demonstrated through test and figures, the new hazard zones from the project depict the outer limit of ‘moderate’ to ‘high’ consequence impacts based on threshold levels established in the first DEIR.” However, the DEIR did not determine the impacts to be less than significant because they were all “low” consequence. Rather, the determination was based on the conclusion that none of the potential impacts exceeded the standard of significance which required that impacts have both “moderate” to “high” consequence of release and frequent (more than once per year) or periodic (once per decade) probability of release. The comparative worst case scenario analysis conducted in the RDEIR reasonably considered only those impacts that had moderate or high consequence of release. Accordingly, there was no error in the analysis of hazard impacts in the RFEIR.

Disposition

The peremptory writ of mandate issued by the trial court is affirmed.

Pollak, J.

We concur:

McGuinness, P.J.*

Jenkins, J.

* Retired Presiding Justice of the Court of Appeal, First Appellate District, Division Three, assigned by the Chief Justice pursuant to article VI, section 6 of the California Constitution.

Filed 4/12/18

CERTIFIED FOR PUBLICATION

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIRST APPELLATE DISTRICT

DIVISION THREE

RODEO CITIZENS ASSOCIATION,

Plaintiff and Appellant,

v.

COUNTY OF CONTRA COSTA et al.,

Respondents;

PHILLIPS 66 COMPANY,

Real Party in Interest and Respondent.

A151184

(Contra Costa County
Super. Ct. Nos. MSN15-0301,
MSN15-0345, MSN15-0381)

ORDER CERTIFYING
OPINION FOR PUBLICATION

THE COURT:

The opinion in the above-entitled matter filed on March 20, 2018, was not certified for publication in the Official Reports. For good cause it now appears that the opinion should be published in the Official Reports and it is so ordered.

Date: April 12, 2018

McGuiness, J.
McGuiness, P.J.*

* Retired Presiding Justice of the Court of Appeal, First Appellate District, Division Three, assigned by the Chief Justice pursuant to article VI, section 6 of the California Constitution.

Trial court:	Contra Costa County Superior Court
Trial judge:	Honorable Barry P. Goode
Counsel for plaintiff and appellant Rodeo Citizens Association:	Shute, Mihaly & Weinberger LLP Ellison Folk Joseph D. Petta Jenner & Block LLP Michael P. McNamara Benjamin J. Brysacz
Counsel for respondents County of Contra Costa et al.:	Sharon Anderson, County Counsel Thomas L. Geiger, Assistant County Counsel
Counsel for real party in interest and respondent Phillips 66 Company:	ALSTON & BIRD LLP Jocelyn Thompson Paul J. Beard II Andrea S. Warren